Remarks

Applicants have amended the specification to remove the reference to hyperlinks as requested by the Examiner. Accordingly, no new matter has been added to the specification and the entry of the amendments is respectfully requested.

Applicants have amended the claims to delete references to term "substantially pure". Applicants also have amended the claims to refer to isolated nucleic acids. The term "isolated nucleic acid" is supported, for example in paragraph [0023]. Applicants have further amended the claims to nucleic acids that are 99% identical to SEQ ID NO: 1. Accordingly, no new matter has been introduced by the claim amendments and their entry is respectfully requested.

Applicants have added new claims 134 and 135 to a pharmaceutical composition comprising SEQ ID NO: 15 and a pharmaceutical composition comprising a protein encoded by SEQ ID NO: 15. Support for such claims can be found, e.g. in paragraph [0166]. Accordingly, no new matter has been introduced by the new claims and their entry is respectfully requested.

Applicants have canceled claims 129 and 130 without prejudice.

Applicants reserve the right to continue prosecution of any canceled or withdrawn subject matter in continuation or divisional applications.

Applicants have further amended the specification to remove the hyperlinks objected to by the Examiner. Accordingly, no new matter has been introduced to the specification and the entry of the amendments is respectfully requested.

Applicants now turn to the specific rejections.

The Examiner also rejected claims 68-73, 75, 77, 79-81, 105-114, 121, 122 and 129-131 as allegedly not complying with 35 U.S.C. §112, second paragraph definiteness requirement. Claims 69, 71, 73, 75, 77, 80, 81, 105, 107-109, 113, 114, 121, 122 and 129-131 were rejected because they depend from indefinite claims. Specifically, the Examiner noted that the terms "substantially identical" and "substantially pure" are not defined.

Applicants respectfully disagree and submit that the rejection should be withdrawn for the following reasons.

Applicants submit that the term "substantially pure" is clearly defined in the specification, e.g., in paragraph [0023]. However, to expedite prosecution, Applicants have amended the claims as described, *supra*. In view of the amendments to the claims, Applicants respectfully submit that the rejection has been obviated.

The Examiner rejected claims 129 and 130 directed to vaccines against SARS as allegedly not complying with 35 U.S.C. §112, first paragraph enablement requirement. The Examiner alleged that because there are no examples of vaccines in the specification and the art has later shown that vaccines are hard to produce, a skilled artisan would not have been able to make and use such vaccines based on the description in the specification.

While Applicants respectfully disagree, to expedite prosecution, Applicants have cancelled claims 129 and 130 without prejudice.

In view of the cancellation of claims 129 and 130, Applicants respectfully submit that the rejection has been rendered moot.

The Examiner rejected claims 68-70, 72, 73, 75, 77, 79-81, 105-113, 121, 122 and 131 under 35 U.S.C. §102(e) as allegedly being anticipated by Rota et al. (US 7,220,852 B1, effectively filed 25 April 2003)("Rota").

Applicants respectfully disagree and submit that the rejection should be withdrawn for the following reasons.

Rota provisional application No. 60/465,738 filed on April 25, 2003 discloses SEQ ID NO: 1, which shows 29,727 nucleotides of the Severe Acute Respiratory Syndrome (SARS) virus genome.

Applicants respectfully submit an antedating declaration under 37 CFR 1.131 which establishes that the Applicants had conceived and reduced to practice a SARS nucleic acid sequence prior to April 23, 2003, i.e., prior to the effective filing date of Rota (see Exhibit B of the Declaration).

Applicants submit herewith a sequence comparison between the Rota SEQ ID NO: 1 and the SEQ ID NO: 15 of the present application (Exhibit C). Applicants also submit herewith a comparison between the sequence published before April 23, 2003 and Applicants' SEQ ID NO: 15 (Exhibit D). As can be seen, all these sequences are substantially identical.

In view of the declaration and Exhibits C and D, Applicants respectfully submit that the rejection over Rota should be withdrawn.

The Examiner rejected claims 68-70, 72, 73, 79-81, 110-114, 121 and 122 are rejected under 35 U.S.C. §102(e) as being anticipated by Peiris et al. (US 7,547,512 B2, priority effective filing date: 24 March 2003 through 25 April 2003). Specifically, Peiris claims the benefit of a number of different provisional applications, namely,

U.S. provisional application No. 60/457,031, filed Mar. 24, 2003;

U.S. provisional application No. 60/457,730, filed Mar. 26, 2003;

U.S. provisional application No. 60/459,931, filed Apr. 2, 2003;

U.S. provisional application No. 60/460,357, filed Apr. 3, 2003;

U.S. provisional application No. 60/461,265, filed Apr. 8, 2003;

U.S. provisional application No. 60/462,805, filed Apr. 14, 2003;

U.S. provisional application No. 60/464,886 filed Apr. 23, 2003;

U.S. provisional application No. 60/465,738, filed Apr. 25, 2003; and

U.S. provisional application No. 60/470,935, filed May 14, 2003; and

The present claims are directed to SEQ ID NO: 15, which represents the complete sequence of SARS virus of 29,751 nucleotides representing the entire genomic sequence of the Tor2 isolate of SARS virus and sequences that are 99% identical to said sequence.

None of the Peiris provisional patent applications filed prior to April 25, 2003 disclose the entire SARS nucleic acid sequence. The earliest Peiris application that discloses the entire SARS sequence is No. 60/465,738 filed on April 25, 2003, which discloses SEQ ID NO: 15, which shows 29,742 nucleotides of the SARS virus genome.

The instant claims are directed to an isolated SARS virus nucleic acid molecule and nucleic acid sequences that are 99% identical to said sequence.

Applicants respectfully submit an antedating declaration under 37 CFR 1.131 which establishes that the Applicants had conceived and reduced to practice a SARS nucleic acid sequence prior to April 25, 2003, i.e., prior to the effective filing date of Peiris.

Applicants submit herewith a sequence comparison between the Peiris SEQ ID NO: 15 and the SEQ ID NO: 15 of the present application (Exhibit C). Applicants also submit herewith a comparison between the sequence published before April 23, 2003 and Applicants' SEQ ID NO: 15 (Exhibit D). As can be seen, all these sequences are substantially identical.

sIn view of the declaration and Exhibits C and D, Applicants respectfully submit that the rejection over Peiris should be withdrawn.

Claims 68-70, 72, 73, 79-81, 110-113 and 121 are rejected under 35 U.S.C. §102(a) as being anticipated by Poutanen et al. (published online on 31 March 2003)("Poutanen").

Applicants disagree and submit that the rejection should be withdrawn for the following reasons.

The instant invention is an isolated SARS virus nucleic acid molecule comprising SEQ ID NO:15 and sequences 99% identical to said sequence; and a nucleic acid comprising a sequence that is

complementary to said sequences. The specification discloses that SEQ ID NO:15 is the TOR2 strain isolated from a patient in Toronto, Canada.

The Examiner alleged that Poutanen discosed the SARS virus nucleic acid molecules, amplicons, which were allegedly synthesized by RT-PCR from respiratory specimens of patients in Toronto, Canada. See page 2002.

Poutanen indicated that they had sequenced a clone and directed the reader to GenBank accession number AY271716.

The sequence of AY271716 was not published in Poutanen.

The sequence of AY271716 was submitted to the GenBank on April 8, 2003. EXHIBIT A, which is a copy of the GenBank database page describing the sequence information for ID No. AY271716.

Poutanen did not disclose SEQ ID NO: 15. Therefore Poutanen cannot anticipate the present claims and the rejection over Poutanen should be withdrawn.

In view of the foregoing, Applicants respectfully submit that all claims are in condition for allowance. Early and favorable action is requested.

In the event that any additional fees are required, the Commissioner is authorized to charge Nixon Peabody LLP Deposit Account No. 50-0850.

Date: April 28, 2010

Respectfully submitted,

/Leena H. Karttunen/

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